

# PATENT SPECIFICATION

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## (54) MIRROR HEAD

(71) We, BRITAX (WINGARD) LIMITED, a British Company of Chandler Road, Chichester, Sussex, PO19 2UG, do hereby declare the invention for which we pray that a patent may be granted to us and the method by which it is to be performed to be particularly described in and by the following statement:-

This invention relates to a mirror head which may be used in a rear view mirror assembly of a vehicle. One of the aims of the present invention is to provide a mirror head in which the reflective member, for example, a pane of silvered glass, cannot be easily displaced from a retaining bezel, if the bezel is accidentally struck. This problem can arise in existing mirror heads because the reflective member is retained in a shallow groove or undercut in the bezel. Deepening the groove or undercut is not, by itself, a solution to this problem because it would then be very difficult, or impossible, to assemble the reflective member and bezel, in for example, a casing to form the mirror head.

A mirror head according to the present invention comprises a body having a peripheral edge, a reflective member, and a bezel fitted to said edge for retaining the reflective member; said edge and said bezel together defining a peripheral groove which receives the reflective member, said groove being interrupted by a series of interengaging portions of the body and the bezel, which portions are interlocked by the reflective member received in said groove.

The edge of said body may have a series of slots which are interengaged with a series of projections on the bezel. Preferably, the projections are hooked-shaped so as to engage an interior surface of the body defining said edge. The body may be in the form of a casing or housing with a castellated edge defining said slots. The peripheral groove in the bezel may be bounded on one side by an inwardly directed lip which provides a resilient seal

against the reflective member. In cross section, said bezel may define a pair of substantially hooked-shaped parts, a first part defining the peripheral groove and said resilient lip, and a second part defining another peripheral groove in which the edge of said body is received. The bezel may include a second outwardly directed lip which, when the mirror head is moved through the air, causes turbulence for keeping the face of the reflective member clean.

Embodiments of the invention are described with reference to the accompanying drawings, in which;

Figure 1 is a view in perspective, and partly in section, of the parts of a mirror head,

Figure 2 is a sectional elevation of a mirror head using the parts shown in Figure 1,

Figure 3 is a sectional view showing a detailed part of the head of Figure 2, and

Figure 4 is a view similar to that of Figure 3 showing a modification to the bezel.

Referring to Figures 1-3, a casing 1 has a number of slots 2 spaced about its peripheral edge. The slots 2 are defined by a castellated edge of which each section 4 has a groove 3. The grooves 3 are aligned to define a peripheral groove for receiving a reflective member 10, such as a pane of silvered glass. The peripheral groove need not be in the same plane, for example, it may be curved for receiving a part-spherical reflective member.

A bezel 20 has a series of hook-shaped projections 21 which mate with slots 2. The bezel also defines a peripheral groove 23, for receiving the edge of the reflective member 10, bounded by a resilient lip 22. The bezel is formed from resilient material such as rubber or deformable plastics. The mirror head is assembled as follows:

(a) the casing 1 and bezel 20 are mated, and

(b) the reflective member 10 is "jumped" or sprung into the grooves 3, 23.

When the casing 1 and bezel 20 are mated, the fitting of the reflective member 10 into the groove 3 is possible because each section 4 of the castellation can be deformed independently and because the bezel 20 is made of resiliently deformable material. The construction allows very large undercuts or grooves so that the reflective member 10 cannot be displaced from the bezel 20 by accidentally striking the bezel.

Figure 4 shows a bezel 29 which is modified by an additional lip 30. Lip 30 is rearwardly directed and causes turbulence, when the mirror head is moved through the air by driving the vehicle, for keeping the face of the reflective member clean. The lip must be soft to meet safety regulations.

#### WHAT WE CLAIM IS:

1. A mirror head comprising a body having a peripheral edge, a reflective member, and a bezel fitted to said edge for retaining the reflective member; said edge and said bezel together defining a peripheral groove which receives the reflective member, said groove being interrupted by a series of interengaging portions of the body and the bezel, which portions are interlocked by the reflective member received in said groove.

2. A mirror head according to Claim 1 wherein the edge of said body has a series of slots which are interengaged with a series of projections on the bezel.

3. A mirror head according to Claim 2 wherein the projections are hook-shaped so as to engage an interior surface of the body defining said edge.

4. A mirror head according to Claim 2 or 3 in which the body is in the form of a casing or housing with a castellated edge defining said slots.

5. A mirror head according to any one of the preceding claims in which the peripheral groove in the bezel is bounded on one side by a lip directed inwardly of the groove and which provides a resilient seal against the reflective member.

6. A mirror head according to Claim 5 wherein, in cross section, the bezel defines a pair of substantially hook-shaped parts, a first one of said parts forming said resilient lip which bounds the peripheral groove in which the reflective member is received, and the second one of said parts having another peripheral groove in which the edge of said body is received.

7. A mirror head according to any one of the preceding claims in which the bezel includes a second outwardly directed lip for causing turbulence, when the mirror head is moved through the air, for keeping the face of the reflective member clean.

8. A mirror head substantially as herein described with reference to Figures 1-3 of the accompanying drawings.

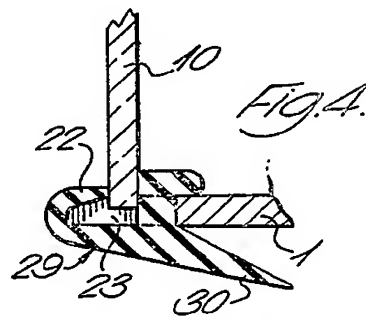
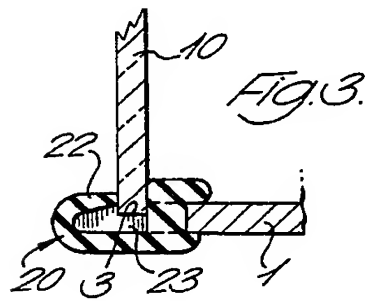
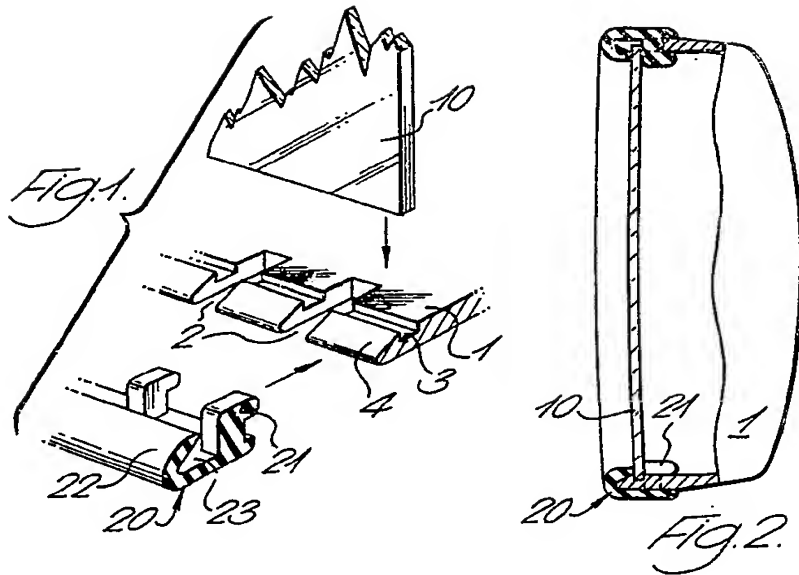
9. A mirror head substantially as herein

described with reference to Figure 4 of the accompanying drawings.

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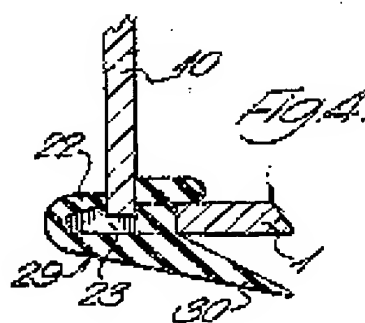
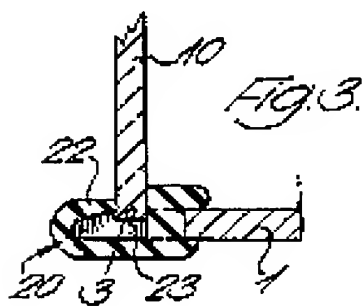
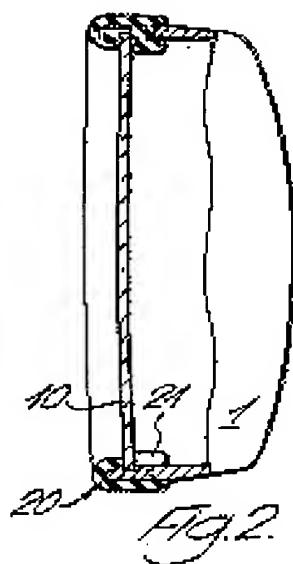
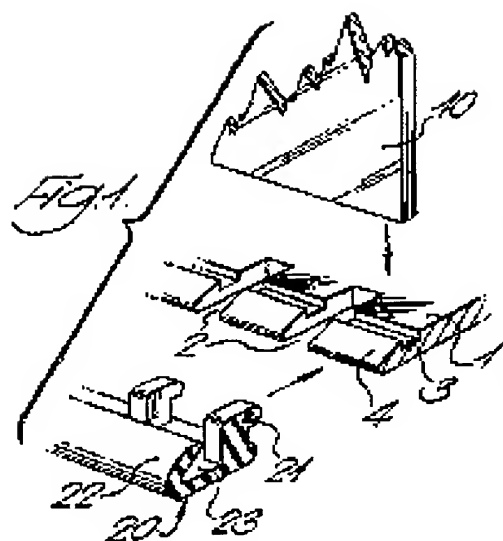


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